

Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the above-referenced application. In accordance with 37 C.F.R. 1.121, as revised June 30, 2003, claims are labeled as “Original”, “Currently amended”, “Canceled”, “Withdrawn”, “Previously presented”, “New”, or “Not entered”.

1-2. (Canceled).

3. (Currently amended) A transcriptional activator comprising:

a DNA binding moiety; and

a transcription activation peptide that is at least approximately 25% hydrophobic and ~~is between about 6 and 25~~ wherein the peptide is 6, 8, 11, or 13 amino acids in length, which peptide is linked to the DNA binding moiety in a manner that does not interfere with its DNA binding activity, the transcription activation peptide being both necessary and sufficient to activate transcription,

the transcriptional activator being characterized by an ability, when expressed in yeast cells, to activate transcription from a promoter including a recognition site for the DNA binding moiety approximately 250-1000 basepairs upstream of the transcription start site,

the transcriptional activator being characterized by an inability to squelch transcriptional activation by LexA-Gal4 when expressed in yeast.

4-6. (Canceled)

7. (Currently Amended) A transcriptional activator comprising:

a DNA binding moiety; and

a transcription activation peptide that is at least approximately 25% hydrophobic and is between about 6 and 25 amino acids in length, which peptide is linked to the DNA binding moiety comprising Gal4(1-100) in a manner that does not interfere with its DNA binding activity, the transcription activation peptide being both necessary and sufficient to activate transcription,

the transcriptional activator being characterized by an ability, when expressed in yeast cells, to activate transcription from a promoter including a recognition site for the DNA binding moiety at least half as well as does Gal4 from a promoter containing at least one Gal4 DNA binding site approximately 250-1000 basepairs upstream of the transcription start site,

the transcriptional activator being characterized by an inability to squelch transcriptional activation by LexA-Gal4 when expressed in yeast.

8-9. (Canceled).

10. (Currently Amended) A transcriptional activator comprising:

a DNA binding moiety; and

a transcription activation peptide that is selected from the group consisting of LS4 (QLPPWL; SEQ ID NO: 8); LS8 (QFLDAL; SEQ ID NO: 16); LS11 (LDSFYV; SEQ ID NO: 21); LS12 (PPPPWP; SEQ ID NO: 23); LS17 (SWFDVE; SEQ ID NO: 33); LS19 (QLPDLF; SEQ ID NO: 37); LS20 (PLPDLF; SEQ ID NO: 39); LS21 (FESDDI; SEQ ID NO: 41); LS24 (QYDLFP; SEQ ID NO: 45); LS25 (LPDLIL; SEQ ID NO: 47); LS30 (LPDFDP; SEQ ID NO:

55); LS35 (LFPYSL; SEQ ID NO: 57); LS51 (FDPFNQ; SEQ ID NO: 71); LS64 (DFDVLL; SEQ ID NO: 85); LS102 (HPPPPI; SEQ ID NO: 92); LS105 (LPGCFF; SEQ ID NO: 95); LS106 (QYDLFD; SEQ ID NO: 97); LS120 (YPPPPF; SEQ ID NO: 115); LS123 (PLPPFL; SEQ ID NO: 118); LS135 (LPPPWL; SEQ ID NO: 136); LS136 (VWPPAV; SEQ ID NO: 138); LS152 (DPPWYL; SEQ ID NO: 154); LS153 (LY; SEQ ID NO: 156); LS158 (FDPFGL; SEQ ID NO: 160); LS160 (PPSVNL; SEQ ID NO: 162); LS201 (YLLPTCIP; SEQ ID NO: 167); LS202 (LQVHNST; SEQ ID NO: 169); LS203 (VLDFTPFL; SEQ ID NO: 171); LS206 (HHA FYEIP; SEQ ID NO: 175); LS212 (PWYPTPYL; SEQ ID NO: 183); LS223 (YLLPFLPY; SEQ ID NO: 195); LS225 (YFLPLLST; SEQ ID NO: 199); LS232 (FSPTFWAF; SEQ ID NO: 209); LS241 (LIMNWPTY; SEQ ID NO: 221), each of these peptides extended at its amino terminal end by Gal4 residues 96-100, and each of these peptides extended at its amino terminal end by Gal4 96-100 except that one or both of Gal4 residues 99 and 100 has been substituted with a different amino acid;

which peptide is linked to the DNA binding moiety in a manner that does not interfere with its DNA binding activity, the transcription activation peptide being both necessary and sufficient to activate transcription,

the transcriptional activator being characterized by an ability, when expressed in yeast cells, to activate transcription from a promoter including a recognition site for the DNA binding moiety approximately 250-1000 basepairs upstream of the transcription start site,

the transcriptional activator being characterized by an inability to squelch transcriptional activation by LexA-Gal4 when expressed in yeast.